

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF DRINKING WATER
MARCH 16, 2021**

ITEM 4

SUBJECT

CONSIDERATION OF A RESOLUTION ADOPTING THE PROPOSED
PRIORITIZATION OF DRINKING WATER REGULATIONS DEVELOPMENT FOR
CALENDAR YEAR 2021

DISCUSSION

All public water systems, as defined in Health and Safety Code (HSC) section 116275, are subject to regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA) under the Safe Drinking Water Act of 1974, as amended (42 U.S.C. 300f *et seq.*), as well as by the State Water Resources Control Board (State Water Board) under the California Safe Drinking Water Act (HSC, div. 104, pt. 12, ch. 4, § 116270 *et seq.*).

California has been granted primary enforcement responsibility (primacy) by U.S. EPA for public water systems (PWS) in California. California has no authority to enforce federal regulations. Federal laws and regulations require that California, in order to receive and maintain primacy, promulgate regulations for California that are no less stringent than the federal regulations.

The State Water Board is tasked with adopting drinking water regulations and recycled water regulations associated with the protection of public health. These regulations include primary drinking water standards (*e.g.*, maximum contaminant levels (MCLs) or treatment techniques), monitoring and reporting requirements, and any other standards related to providing safe drinking water (*e.g.*, operator requirements, laboratory accreditation standards, design standards, secondary drinking water standards, pipe separation standards, *etc.*).

Of the 2020 drinking water regulatory priority work, the Environmental Laboratory Accreditation Program (ELAP) regulatory overhaul, perchlorate detection limit for purposes of reporting (DLR), and Revised Total Coliform Rule (RTCR) have been adopted. The ELAP regulations took effect on January 1, 2021, and the perchlorate DLR and RTCR regulations are expected to take effect in late spring 2021.

Establishing Priorities for Regulatory Development Work

The prioritization of the regulatory development work depends on several factors, including:

1. The enhancement of public health achieved by new or revised regulatory requirements or MCLs;

2. New or revised federal drinking water regulations (MCL, treatment technique addressing a specific contaminant or other requirement);
3. Any statutory mandate to adopt a regulation within a specific timeframe; and
4. Other priorities and staffing resources available for the development and implementation of regulations.

Review of Existing MCLs

HSC section 116270 states California's legislative intent is to establish primary drinking water standards at least as stringent as those established under the federal Safe Drinking Water Act and to establish a program more protective of public health than minimum federal requirements. HSC sections 116365(a) and (b) require the State Water Board to set primary drinking water standards as close to the corresponding public health goal (PHG) as technically and economically feasible, placing primary emphasis on the protection of public health.

HSC 116365(g) requires review of each primary drinking water standard at least once every five years. If changes in technology or treatment techniques permit materially greater protection of public health the State Water Board must amend the standard. Existing MCLs were last reviewed in 2018. The results of that review are available at the State Water Board's [MCL Review Process webpage](#).

In conducting the 2018 review, staff found that detection limits for purposes of reporting (DLRs) at concentrations greater than the corresponding PHGs limits the ability to evaluate public exposure to contaminants at concentrations greater than the PHG but less than current DLR, hindering evaluations of whether it is technologically feasible to establish MCLs closer to the PHGs. Thirty-three current MCLs have associated DLRs set at concentrations greater than their corresponding PHGs. A discussion of proposed work on lowering DLRs for metals is provided in Item 7.

In February 2020, the Office of Environmental Health Hazard Assessment (OEHHA) issued final revised PHGs for individual trihalomethanes bromoform, chloroform, bromodichloromethane, and dibromochloromethane. Draft PHGs have been developed for five haloacetic acids—monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid (collectively, HAA5)—and are expected to be finalized this year. Both trihalomethanes and haloacetic acids are disinfection byproducts; MCL revisions for all nine of these contaminants will likely be grouped for concurrent, coordinated development in 2022. Draft PHGs for PFOA, PFOS, and 1,4-dioxane are also expected to be issued for public comment in 2021.

Evaluation of Current Priorities for Regulatory Development

1. Hexavalent Chromium

On May 31, 2017, the Superior Court of Sacramento County issued a judgment invalidating the hexavalent chromium maximum contaminant level (MCL) for drinking water. The MCL for hexavalent chromium was deleted from the California Code of Regulations September 11, 2017 and is no longer in effect. The court also ordered the State Water Board to develop a new MCL. In establishing MCLs,

Health and Safety Code section 116365 requires the State Water Board “...to *establish a contaminant's maximum contaminant level (MCL) at a level as close as is technically and economically feasible to its public health goal (PHG).*” The court’s primary reason for finding the MCL invalid was that the California Department of Public Health (which was responsible for the drinking water program before it was transferred to the State Water Board) “failed to properly consider the economic feasibility of complying with the MCL.” An economic feasibility white paper was issued for public comment on March 6, 2020, with a public workshop held on April 27, 2020. Preliminary occurrence data and treatment cost estimates were released in October and November 2020, with public workshops on the cost estimates held on December 8 and 9, 2020. Staff are evaluating comments received regarding treatment technologies and cost estimating methodology. Publication of a Notice of Proposed Rulemaking is projected for mid-2021.

2. Lead and Copper Rule Revision

U.S. EPA promulgated final revisions to the Lead and Copper Rule (LCR) on January 15, 2021. The State Water Board will have three years to promulgate its own regulations and seek primacy for the new rule. With the new regulation review hold from the new presidential administration, it is uncertain whether any changes may be made to the requirements or effective dates. Staff are participating in national implementation workgroups and focusing on the following priority work:

a. Lead and Copper Rule Revision

Division of Drinking Water (DDW) is working to identify and develop potential changes to the new regulatory requirements to increase public health protection and harmonize the new federal regulations with California’s existing statutes on lead. The revisions could include elements such as proactive lead service line replacement programs, additional public education and outreach, additional monitoring, and a lower action level.

b. Assistance to Department of Social Services for Daycare Regulations

AB 2370 (Chapter 676, Statutes of 2018) added section 1597.16 to the Health and Safety Code, requiring licensed child day care centers located in buildings constructed before 2010 to conduct initial sampling of drinking water for lead contamination between January 1, 2020 and January 1, 2023, and to repeat lead sampling every five years from the date of the initial test. The analytical results of these tests must be submitted electronically to the State Water Board. If the results show elevated levels of lead, the State Water Board must report to the results to the Department of Social Services (DSS).

3. Cross-Connection and Backflow Protection Control Regulations

Assembly Bill 1671 added section 116407 to the Health and Safety Code and requires that on or before January 1, 2020, the State Water Board adopt standards for backflow protection and cross-connection control and authorizes the State Water Board to do so through the adoption of a policy handbook. The draft policy handbook should already be posted—or will be very soon—for public comment. Public workshops on will begin in April 2021, with Board adoption anticipated in late summer 2021.

4. Direct Potable Reuse (DPR)

Under the provisions of Assembly Bill 574 (AB 574), the State Water Board is required to adopt uniform water recycling criteria for direct potable reuse through raw water augmentation by December 31, 2023. AB 574 requires that the State Water Board convene an expert panel to review the proposed criteria and adopt a finding as to whether, in its expert opinion, the proposed criteria would adequately protect public health. DDW continues work on an overall approach to regulating DPR projects, with a continued need for supporting research.

5. Microplastics – Testing and Reporting Requirements

Microplastics are new and emerging contaminants of concern, not regulated in drinking water at the federal level. In 2018, the Senate and Assembly approved SB 1422, adding section 116376 to the Health and Safety Code and requiring the State Water Board to take actions by July 1, 2020, to adopt a definition of microplastics in drinking water, and by July 1, 2021, to adopt standard analytical method(s), requirements for four years of testing and reporting, accredit qualified laboratories, and consider issuing consumer health guidance for microplastics in drinking water. The State Water Board adopted a definition of microplastics in drinking water in June 2020.

6. Investigation of Per- and Polyfluoroalkyl Substances (PFAS)

DDW issued interim notification and response levels for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) in July 2018. In August 2019, based on a recommendation from OEHHA, DDW updated the notification levels and requested that OEHHA develop public health goals for these compounds. In February 2020, DDW lowered the response levels for PFOA and PFOS, requested that OEHHA prepare PHGs for PFOA and PFOS, and requested that OEHHA consider making notification level recommendations for seven other PFAS compounds found through water system monitoring. On January 14, 2021, OEHHA provided its notification level recommendation for perfluorobutane sulfonic acid (PFBS) and on January 29, 2021, DDW provided notice of proposed PFBS notification and response levels. DDW continues to investigate the extent of contamination of these and other PFAS materials in drinking water sources throughout the state. This information will be used to determine whether DDW should request OEHHA to develop PHGs for additional PFAS compounds.

7. Metal Detection Limits for Purposes of Reporting (DLR)

DDW is continuing work to evaluate potential for reporting to concentrations closer to PHGs, beginning with metals. As lower reporting levels are determined, staff proposes revising DLRs to allow occurrence data collection to better inform the MCL review process. Preliminary results from a survey of California ELAP certified laboratories indicate that the DLR for lead may be lowered from 5 ppb (µg/l) to 1 ppb without sacrificing laboratory capacity. This review is still in progress, but staff anticipate proposing DLR revisions for lead and several other metals for State Water Board consideration in 2021.

8. Primacy Package Applications

There is a backlog of approximately 18 primacy packages, some dating back to pre-1997. This is a high priority for U.S. EPA and DDW is coordinating with U.S. EPA to reduce the backlog. U.S. EPA Region 9 has provided formal comments on submitted primacy packages for its Consumer Confidence Report, Public Notification, Administrative Penalty Authority, and Public Water System definition rules describing needed changes in primacy applications. U.S. EPA has further indicated intent to provide similar comments on the Ground Water Rule and Long Term 2 Enhanced Surface Water Treatment Rule in early 2021. DDW expects to submit complete primacy package applications for the recently adopted Revised Total Coliform Rule and most of the rules receiving EPA comments in mid-2021.

9. Electronic Reporting of Drinking Water Quality Data

DDW is developing revised regulations requiring electronic submittal of drinking water analytical results to be reported in a format compliant with U.S. EPA's Cross Media Electronic Reporting Regulation (CROMERR). The proposed regulations would be contained in California Code of Regulations, Title 22, division 4, Chapter 15, Article 19, and would revise the format and form for reporting electronically delivered water quality data. Proposed revisions to the existing regulation are planned for public notice and comment in mid-2021.

10. Water Quality Standards for On-Site Treatment and Reuse

Effective January 1, 2019, Article 8 was added to Chapter 7 of Division 7 of the Water Code (13558 et seq.), requiring the State Water Board, on or before December 1, 2022, to adopt regulations for risk-based water quality standards for the on-site treatment and reuse of non-potable water for non-potable end uses in multi-family residential, commercial, and mixed-use buildings. This work is currently underway. Stakeholder outreach has commenced, with a Notice of Proposed Rulemaking tentatively planned for publishing in late 2021.

11. Recycled Water Regulations – Comprehensive Update

Assembly Bill 1180 amends the Water Code section 13521.2 requiring the State Water Board, on or before January 1, 2023, to update the uniform statewide criteria for nonpotable recycled water uses. The update should incorporate by reference the criteria and applicable backflow protection provisions that are contained in the Cross-Connection Control Policy Handbook. The regulations that pertain to nonpotable recycled water uses have not been updated since 2000.

12. Maximum Contaminant Levels

DDW plans to investigate the development of new or revised MCLs for the following contaminants:

a. N-nitrosodimethylamine (NDMA)

NDMA is formed during disinfection of water and wastewater. While there is currently no MCL for NDMA, there are notification and response levels of 0.01 µg/l and 0.3 µg/l, respectively. The current NDMA PHG was issued in 2006, and is set at 0.003 µg/l, based on carcinogenicity.

b. Styrene

Styrene is an organic chemical that is widely used to make rubber and plastics. The current styrene MCL and DLR are 100 µg/l and 0.5 µg/l, respectively. OEHHA has issued a PHG of 0.5 µg/l, based on carcinogenicity, and identified a health protective value of 4 µg/l, based on genotoxicity and adverse effects during gestation.

c. Cadmium

Cadmium is a naturally occurring element found in soil and mineral deposits, metal plating discharges, runoff from waste batteries, plastic pigments, and galvanized pipe corrosion. The current cadmium MCL and DLR are 5 µg/l and 1 µg/l, respectively. OEHHA has issued a PHG of 0.04 µg/l, based on kidney toxicity.

POLICY ISSUE

Should the State Water Board adopt the proposed resolution setting priorities for and guiding staff development of regulations?

FISCAL IMPACT

There is no fiscal impact and no funds are being requested.

REGIONAL BOARD IMPACT

None.

STAFF RECOMMENDATION

The State Water Board should adopt the proposed Resolution.